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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,128	03/25/2004	Charles Ruff	111079-134715	3810
25943	7590	09/16/2005		
SCHWABE, WILLIAMSON & WYATT, P.C. PACWEST CENTER, SUITE 1900 1211 SW FIFTH AVENUE PORTLAND, OR 97204				
			EXAMINER PATEL, PARESH H	
			ART UNIT 2829	PAPER NUMBER

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/811,128	RUFF ET AL.	
	Examiner	Art Unit	
	Paresh Patel	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 13-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/25/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-12) in the reply filed on 07/18/2005 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9 and 12^{are} rejected under 35 U.S.C. 102(b) as being anticipated by Takehiro et al. (JP 07-31120).

Regarding claim 1, Takehiro et al. (hereafter Takehiro) in fig. 1 discloses an apparatus, comprising:

a housing [3, 4, 5] including a first housing end [towards 4] portion having a round tapered wall [see outer diameter of end portion] defining a tapered cavity [cavity for 6]; and

- a probe pin [2, 6 and 7] having a pin base portion [2] rigidly mounted to the housing and a pin tip portion [6] movably [using 7] mounted to the housing for movement between a first position [before or after contacting 8] wherein the pin tip portion is disposed in a spaced-apart relationship with the pin base portion and protrudes into the tapered cavity, and a second position [before or after contacting the

8] wherein the pin tip portion is moved toward the pin base portion relative to the first position.

Regarding claim 2, Takehiro discloses the apparatus according to claim 1, further comprising a spring mechanism [7] mounted between the pin tip portion and the pin base portion.

Regarding claim 3, Takehiro discloses the apparatus according to claim 2, wherein the housing includes an internal wall [wall near 5] defining a passageway that opens at one end into the tapered cavity; the pin base portion and at least a part of the pin tip portion being disposed in the passageway in spaced-apart relationship to the internal wall.

Regarding claim 4, Takehiro discloses the apparatus according to claim 3, wherein the housing includes an insulating first sleeve portion [5 near 4] disposed within the passageway and proximally located to the tapered cavity and an insulating second sleeve portion [5 near 1] disposed within the passageway and distally located to the tapered cavity; the pin tip portion is glidingly mounted within the first sleeve portion; and the pin base portion is rigidly mounted in the second sleeve portion.

Regarding claim 5, Takehiro discloses the apparatus according to claim 4, wherein the spring mechanism includes a helical spring [7] having a first and a second spring end with the first spring end being disposed to engage the pin base portion and the second spring end being disposed to engage the pin tip portion.

Regarding claim 6, Takehiro discloses the apparatus according to claim 5, wherein the housing includes a second housing end portion [1] integrally formed with

the first housing end portion to define a housing body; the second housing end portion having a plurality of threads [threads on 1]; the housing body being formed of a conductive material [metal body]; and the housing body being coupled to electrical ground through the plurality of threads [see Specification].

Regarding claim 7, Takehiro discloses the apparatus according to claim 4, wherein the pin tip portion, the helical spring, and the pin base portion are made of a conductive material; and a signal circuit is formed by the pin tip portion, the helical spring and the base portion with the base pin tip portion being electrically coupled to the first spring end of the helical spring and the second spring end of the helical spring being electrically coupled to the pin tip portion [see fig. 1 and Abstract].

Regarding claim 8, Takehiro discloses the apparatus according to claim 7, wherein the housing has a center axis [see fig. 1]; and the pin base portion; the pin tip portion, the tapered cavity, and the passageway are substantially centered on the center axis.

Regarding claim 9, Takehiro discloses the apparatus according to claim 1, wherein the tapered cavity [cavity between 4 and 5] is configured and dimensioned to receive a coaxial connector.

Regarding claim 12, Takehiro discloses the apparatus according to claim 1, further comprising a coaxial cable [connection between probe and measuring instrument, see Abstract] having an outer shielding ring conductor; an inner conductor surrounded by the shielding ring conductor; and a dielectric interposed between the shielding ring conductor and the inner conductor; and wherein the diameter of the

shielding ring conductor is substantially less than the largest diameter of the tapered cavity.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takehiro as applied to claims 1, 9 and 10 above, and further in view of Lincoln (US 6135799) and AMP (JP 08-294450)

Regarding claim 10, Takehiro discloses all the elements except for the tapered cavity has a conical frustum configuration. Royce (US 4801274) in fig. 1 discloses the tapered cavity has a conical frustum configuration [tapered portion between 43 and 47]. Prior art to Kiyoda (JP 10-221368) discloses a the tapered cavity has a conical frustum configuration [7, 8]. Lincoln (US 6135799) in fig. 1 discloses the tapered cavity has a conical frustum configuration [see the end of 60 or 68]. AMP (JP 08-294450) in fig. 3 discloses the tapered cavity [45] has a conical frustum configuration. Therefore, it would have been obvious matter of design choice to use a conical frustum configuration for cavity, since prior arts discloses such configuration as mentioned above and it appears that the invention would perform equally with modification of Takehiro as disclosed by the prior art here.

Regarding claim 11, Lincoln in fig. 1 discloses a largest diameter of the tapered cavity is substantially greater than the largest diameter of the coaxial connector [34]. AMP also discloses a largest diameter of the tapered cavity [45] is substantially greater than the largest diameter of the coaxial connector [30].

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 571-272-1968. The examiner can normally be reached on 8:00 to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 14, 2005

Paresh Patel
Primary Examiner
Art Unit 2829